

I. What led up to Today's Action?

Spent nuclear fuel (SNF) and high-level radioactive waste (HLW) have been produced since the 1940s, mainly as a result of commercial power production and defense activities. Since then, the proper disposal of these wastes has been the responsibility of the Federal government. The Nuclear Waste Policy Act of 1982 (NWPA, Pub. L. 97-425) formalized the current Federal program for the disposal of SNF and HLW by:

- (1) making DOE responsible for siting, building, and operating an underground geologic repository for the disposal of SNF and HLW;
- (2) directing us to set generally applicable environmental radiation protection standards based upon authority established under other laws; and
- (3) requiring NRC to implement our standards by incorporating them into its licensing requirements for SNF and HLW repositories.

Those responsibilities are generally maintained under the EnPA. Thus, NRC will implement the standards that we are proposing today, and DOE will submit a license application to NRC. The Commission will then determine whether DOE has met the standards and whether to issue an operating license for Yucca Mountain. We anticipate that NRC will require compliance with all of the applicable provisions of 40 CFR part 197 prior to allowing receipt of radioactive material onto the Yucca Mountain site.

In 1985, we established generic standards for the management, storage, and disposal of SNF, HLW, and transuranic radioactive waste. These standards are found in 40 CFR part 191 (50 FR 38066, September 19, 1985). The term “generic” meant that the standards applied to any applicable facilities in the United States, including Yucca Mountain, Nevada. In 1987, the U.S.

Court of Appeals for the First Circuit invalidated the disposal standards and remanded them to us (NRDC v. EPA, 824 F.2d 1258 (1st Cir. 1987)). Also in 1987, the Nuclear Waste Policy Amendments Act (NWPA, Pub. L. 100-203) amended the NWPA by, among other actions, selecting Yucca Mountain, Nevada as the only potential site to be characterized.

In October 1992, the Waste Isolation Pilot Plant Land Withdrawal Act (WIPP LWA, Pub. L. 102-579) and the EnPA became law. The statutes changed our obligations concerning certain radiation standards. The WIPP LWA:

- (1) reinstated the 40 CFR part 191 disposal standards except those that were the specific subject of the remand by the First Circuit;
- (2) required us to issue standards to replace those that were the subject of judicial remand; and
- (3) exempted the Yucca Mountain site from the 40 CFR part 191 disposal standards.

We issued the final disposal standards in 40 CFR part 191 on December 20, 1993 (58 FR 66398) to address the judicial remand.

The EnPA gave us the responsibility to set public health and safety radiation standards for Yucca Mountain. Specifically, section 801(a)(1) of the EnPA directed us to “promulgate, by rule, public health and safety standards for the protection of the public from releases from radioactive materials stored or disposed of in the repository at the Yucca Mountain site.” The EnPA also directed us to contract with NAS to give us findings and recommendations on reasonable standards for protection of public health and safety. Moreover, the statute provided that our standards shall be the only such standards applicable to the Yucca Mountain site and are to be based upon and consistent with NAS’ findings and recommendations. On August 1, 1995, NAS released its report, “Technical Bases for Yucca Mountain Standards” (the NAS Report).